



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/667,301	09/25/2000	Hideo Watanabe	Q60969	1597
7590 06/07/2004				
Sughrue Mion Zinn MacPeak & Seas 2100 Pennsylvania Avenue NW Washington, DC 20037-3202			EXAMINER HUNTER, ALVIN A	
			ART UNIT 3711	PAPER NUMBER

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/667,301

Applicant(s)

WATANABE ET AL.

Examiner

Alvin A. Hunter

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-12 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-12, and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi et al. (JP 11-253578).

Higuchi et al. discloses a golf ball having favorable carrying characteristics, soft feeling, and excellent spin characteristics. The golf ball comprises a solid core, intermediate layer, and cover. The solid core has a diameter of 28 or more, a deflection (compression) of 3.2 to 5.2mm from applying a load of 130kg to 10kg, and Shore D hardness on the front face of 30 to 55. The specific gravity of the core is less than 1.3. It is noted that the difference of a point measured at random and the front face should be no more than 10 degrees. The intermediate layer is formed of a polyurethane resin as the main material, in which contains a thermoplastic polyurethane elastomer. It is also noted that the polyurethane may be blended with materials such as polyamide, polyester, ionomer, etc. The cover has a Shore D hardness of 45 to 68. Higuchi et al. notes that polyester was used to produce the polyurethane of the intermediate layer. The intermediate layer also has a Shore D hardness of 20 to 50, a thickness of 0.5 to 2.5mm, a specific gravity of 1.1 or more, and a deflection (compression) of 3.2 to 5.2mm from applying a load of 130 kg to 10kg. One having ordinary skill in the art would have

found it obvious to have a ratio between the compression of the core and intermediate layer of any value, in particular approximately 1, as taught by Higuchi et al., in order to obtain a golf ball having good feel and flight distance.

Response to Arguments

Applicant's arguments filed April 27, 2004 have been fully considered but they are not persuasive. Applicant argues that Higuchi et al. fails to teach a thermoplastic elastomer selected from the group consisting of polyester, polyamide, polyolefin, and polystyrene and that Higuchi et al. does not teach a compression ratio between the intermediate layer and core. The examiner respectfully disagrees.

Higuchi et al. discloses a polyurethane elastomer having a polyester system. Applicants claim one was given its broadest reasonable interpretation, which was a thermoplastic elastomer selected from the group consisting of "a polyester based or type" elastomer. Applicant does not claim the group to be from a polyester elastomer, polyamide elastomer, polyolefin elastomer, or polystyrene elastomer; only that the thermoplastic elastomer be from a group consisting of polyester, polyamide, polyolefin, and polystyrene. Therefore, it is believe that the rejection above is proper.

In regards to the compression ratio, Higuchi et al. discloses the compression of the core being 3.2 to 5.2mm and the intermediate layer having a compression of 3.2 to 5.2mm. It is clearly apparent that the ratio between the two layers are at least one when both have deflection at the lower limits of the range, and one having ordinary skill in the art would have seen that the compression ratio is implicitly taught by Higuchi et al. Therefore, it is submitted that prima-facie obviousness has been establish.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is 703-306-5693. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Vidovich, can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 3711

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AAH

Alvin A. Hunter, Jr.


GREGORY VIDOVICH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700